UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/274,979	03/23/1999	PHILLIP MERRICK	A007145	9188

23373 7590 06/04/2004

SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER	
COURTENAY III, ST JOHN	
ART UNIT	**PAPER NUMBER**
2126	

DATE MAILED: 06/04/2004

30

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/274,979	MERRICK ET AL.	
	Examiner	Art Unit	
	St. John Courtenay III	2126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 January 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *125-148 and 153-182* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *145-148,153-164 and 180* is/are allowed.

6)☒ Claim(s) *125-130,138,140,165-179,181 and 182* is/are rejected.

7)☒ Claim(s) *131-137,139 and 141-144* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 March 1999* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

ST. JOHN COURTENAY III
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

Claims 125-148 and 153-182 remain pending in the application.

Responsive to Applicant's arguments, the Examiner has withdrawn the 112 1st paragraph rejection set forth in the previous office action. However, the Examiner maintains the position that Applicant's instant utility claims are not entitled to the priority filing date of provisional application 60/079,100, filed March 23, 1998, for the reasons discussed in the previous office action.

Allowable Subject Matter

Responsive to Applicant's amendments and/or arguments of record, the Examiner has reconsidered and withdrawn the art rejections set forth in the last office action for the following claims 131-137, 139, 141-148, 153-164 & 180.

Independent claims 145-148, and 153-156 and associated dependent claims 157-164 & 180 appear to be allowable over the prior art of record, subject to the results of a final search.

Dependent claims 131-137, 139, 141-144 stand objected to as being dependent upon a rejected base claim. These dependent claims appear to be allowable over the prior art of record if rewritten to include all of the limitations of the base claim, subject to the results of a final search.

Claims 125-130, 138, 140, 165-179, 181 & 182 stand rejected for the reasons discussed below and as set forth in the rejections below.

In traversing the rejections Applicant argues that **Winer** fails to teach associating data items of arguments with type labels designating programming language types. The crux of Applicant's arguments is that **W3C XML** does not teach the use of type labels as that term is defined in the instant specification.

In response, the Examiner notes that Applicant on page 21 parenthetically qualifies the claim language, inserting "each data item is associated with a type label (as that term is defined in the specification) and that the type labels are selected from a group including at least two members (e.g., the RECORD, LIST, or ARRAY label discussed at pages 43-45 of the present application)."

The Examiner notes that the argued "programming language types" is not claimed with respect to the claims that stand rejected below. Likewise, the argued "RECORD, LIST, or ARRAY" type labels are not claimed.

W3C XML teaches the use of at least two of the members designating elements containing other elements associated with type labels belonging to the group [e.g, see "3.3.1 Mixed Content" discussion and associated declaration beginning page 16].

W3C XML also teaches (p. 16) under §3.3.2 "Element Content" An element type may be declared to have element content consisting only of other elements. In this ...[cont'd page 17] case, the constraint includes a content model, a context-free grammar governing the allowed types of the child elements and the order in which they appear." See also under "<20 Element-content models" definition, particularly the sentence appearing directly under the definition: "where each *Name* gives the type of an element which may appear as a Child ... The optional character following a name or list governs whether the element or the

content particles in the list may occur one or more, or zero or one times respectively."

Furthermore, **W3C XML** teaches the use of external binary entities in §4.4 that appear to cover virtually any data type, see page 24, as shown below:

4.4 Notation Declaration

Notations identify by name the format of **external binary entities.**
Notation declarations provide a name for the notation, for use in entity and attribute declarations and in attribute-value specifications, and an external identifier for the notation which may allow an XML processor or its client application to locate a helper application capable of processing data in the given notation.

< 31 Notation declarations >

NotationDecl ::= '<!NOTATION' **S Name S Extid S?** '>'

XML processors must provide applications with the name and external identifier of any notation declared and referred to in an attribute value, attribute definition, or entity declaration. They may additionally resolve the external identifier into the **system identifier**, file name, API address, or other information needed to allow the application to call a processor for data in the notation described. (It is not an error, however, for XML documents to declare and refer to notations for which notation-specific applications are not available on the system where the XML processor or application is running.)

As is well established, Applicant may be his own lexicographer, however the words chosen must have clear and antecedent basis in the specification and not be repugnant to their usual meaning.

In the instant case, Applicant sets forth arguments which impute specific meanings to the generic term "type label" in a manner that is repugnant to the intrinsically broad scope of the term and reads limitations from the specification into the claims.

It is a contradiction to take an explicitly generic term such as a "type label" (i.e., any label that denotes any type) and argue that the generic term has a specific meaning as applied to the computer art.

Since this term is not properly accorded status of a "coined term," the claim language is subject to a broad, but reasonable, interpretation. The Examiner has a duty and responsibility to the public and to Applicant to interpret the claims as broadly as reasonably possible during prosecution. In re Prater, 56 CCPA 1381, 415 F.2d 1393, 162 USPQ 541 (1969).

Claimed subject matter, not the specification, is the measure of the invention. The Examiner is required to interpret the claims in light of the specification, however limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. In re Self, 213 USPQ 1,5 (CCPA 1982); In re Priest, 199 USPQ 11, 15 (CCPA 1978). In summary, Applicant is arguing subject matter that is disclosed in the specification, but is not claimed.

Furthermore, with respect to "programming language types" **Winer's** disclosure would clearly be inoperative with respect to implementing Remote Procedure Calls using XML without an association of data items (of arguments) with type labels that designate "programming language types," therefore such necessary operation is inherent in the reference.

With respect to claims 169-172 that describe a placeholder type label designating a placeholder element representing an absence of data, Applicant acknowledges on page 25 of the response that "the **W3C XML** publication provides for the designation of an empty element either by a start tag followed immediately by an end tag, or by a start tag having a special form. The special form of the start tag involves the use of a forward slash '/' at the end of the start tag." The Examiner maintains that the claimed "at least one placeholder type label that designates a placeholder element which represents the absence of data" reads upon the aforementioned **W3C XML** disclosure.

Applicant's arguments, filed Jan. 5, 2004, have been fully considered but they are not deemed to be entirely persuasive. For the reasons detailed above, the rejections set forth in the previous office action under 35 U.S.C. §103 are maintained for claims **125-130, 138, 140, 169-177, 181 & 182** .

New Grounds of Rejection

With respect to independent claims **165-168**, and dependent claims **178 & 179**, Applicant's remarks have been considered, but are deemed to be moot in view of the new grounds of rejection necessitated by Applicant's amendments to the claims. New grounds of rejection under *35 U.S.C. §103* are set forth below:

35 U.S.C. §103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 125-130, 138, 140, 169-177, 181 & 182 are rejected under 35 U.S.C. 103(a) as being obvious over **Winer**, Dave, "RPC over HTTP via XML", http://davenet.userland.com/1998/02/27/rpcOverHttpViaXml, Feb. 27, 1998, pages 1-7, in view of (no author given) "Extensible Markup Language (XML) – W3C Working Draft 14-Nov-96", W3C, document# WD-xml-961114, pages 1-27, Nov. 14, 1996 (referenced hereafter as "**W3C XML**" in this office action).

Note: See MPEP 2128 ELECTRONIC PUBLICATIONS AS PRIOR ART - Prior art disclosures on the Internet or on an on-line database are considered to be publicly available as of the date the item was publicly posted. An electronic publication, like any publication, may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. See MPEP § **2121.01** and § **2123**.

As per independent claim 125:
Winer discloses the invention substantially as claimed:

Winer teaches method of invoking a service at a first machine from a second machine, comprising the steps of generating a service invocation request message at the second machine using a markup language-based message encoding, and transmitting the service invocation request from the second machine, wherein

the message includes plural elements representing data items of at least one argument and which are associated with type labels selected from an encoding group having a predetermined number of members [e.g., see "RPC over HTTP via XML" and associated discussion beginning page 5, with XML corresponding to the claimed "markup language-based message encoding" where data items of at least on argument are associated with type labels selected from an encoding group and the disclosed remote procedure call corresponding to the claimed "invoking a service at a first machine from a second machine, comprising the steps of generating a service invocation request message at the second machine"].

However, **Winer** does not *explicitly* teach the following additional limitations: [Note: XML appears to *inherently* provide for the following limitations, as XML code must necessarily contain all the features required by the XML definition].

W3C XML teaches the use of at least two of the members designating elements containing other elements associated with type labels belonging to the group [e.g, see "3.3.1 Mixed Content" discussion and associated declaration beginning page 16 – see also discussion in response to Applicant's arguments above].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by **Winer** by implementing the improvements detailed above because it would provide **Winer's** system with the enhanced capability of sending types that can contain other subtypes (i.e., children) [e.g., see page 16].

As per independent claim 126:
Winer, as modified by **W3C XML**, teaches a method of invoking a service at a first machine, comprising the steps of:

- receiving at the first machine a service invocation request generated at a second machine in compliance with a markup language-based message encoding, wherein the message includes plural elements representing data items of at least one argument associated with type labels selected from an encoding group having a predetermined number of members, with at least two of the members designating elements containing other elements associated with type labels belonging to the group; and invoking the service in response to the request [see the rejection of claim 125 above – the RPC invokes the service in response to the request].

As per independent claim 127:
Winer, as modified by **W3C XML**, teaches a method of invoking a service at a first machine from a second machine, comprising the steps of:

- generating a service invocation request message at the second machine in compliance with a markup language-based message encoding, wherein the message includes plural elements representing data items of at least one argument and associated with type labels selected from an encoding group having a predetermined number of members, including at least a first type label for designating an element containing lexical data, and a second type label for designating do element containing other elements associated with type labels selected from the group; and transmitting the message [see the rejections of the previous independent claims detailed above, see **W3C XML** XML element declarations where Name identifies the type of the element (i.e., a first type label for designating an element containing lexical data), page 16, and see "3.3.1 Mixed Content" (i.e., a second type label for designating do

element containing other elements associated with type labels selected from the group) page 16; the RPC transmits the message between machines as disclosed by **Winer**].

As per independent claim 128:
Winer, as modified by **W3C XML**, teaches a method of invoking a service at a first machine, comprising the steps of:

- receiving at the first machine a service invocation request message generated at a second machine in compliance with a markup language-based message encoding, wherein the message includes plural elements representing data items of at least one argument and associated with type labels selected from an encoding group having a predetermined number of members, including at least a first type label for designating an element containing lexical data, and a second type label for designating an element containing other elements associated with type labels selected from the group [see the rejections of the previous independent claims detailed above]; and

- invoking the service in response to the message [see Winer's RPC discussion using XML, page 5].

As per independent claim 129:
Winer, as modified by **W3C XML**, teaches a method of invoking a service at a first machine, the method comprising the steps of:

- receiving at the first machine a service invocation request [inherent in the RPC disclosed by Winer];

- invoking the service in response to the request [see RPC disclosed by Winer]; and

- transmitting from the first machine a service invocation reply message in compliance with a markup language-based message encoding (i.e., XML), wherein the message includes plural elements representing data items of at least one argument and associated with type labels selected from an encoding group having a predetermined number of members, including at least a first type label for designating an element containing lexical data, and a second type label for designating an element containing other elements associated with type labels selected from the group [see the rejection of independent claim 127].

As per independent claim 130:
Winer, as modified by **W3C XML**, teaches a method of invoking a service at a first machine, the method comprising the steps of:

- transmitting a service invocation request from a second machine [see Winer's RPC p. 5]; and

- receiving at the second machine a service invocation reply message in compliance with a markup language-based message encoding, wherein the message includes plural elements representing data items of at least one argument and associated with type labels selected from an encoding group having a predetermined number of members, including at least a first type label for designating an element containing lexical data, and a second type label for designating an element containing other elements associated with type labels selected from the group [see the rejections of the previous independent claims detailed above – Winer's RPC discloses the claimed transmission and reception – XML discloses the remaining claim elements, as described above].

As per multiple dependent claim 138:

Winer, as modified by **W3C XML**, teaches the encoding provides a lexical type indicator associated with an element having the first type label [see XML disclosure by Winer and **W3C XML**].

As per dependent claim 140:
Winer, as modified by **W3C XML**, teaches a the mark-up language is XML, the elements are expressed as XML elements, the type labels are expressed as XML element type names, and the lexical type indicator is expressed as an XML attribute on an XML element associated with the first type label, with the lexical type of the data contained in the XML element being designated by the value of the XML attribute [see Winer & W3C XML disclosures].

As per independent claim 169:
Winer, as modified by **W3C XML**, teaches a method of invoking a service at a first machine from a second machine, the method comprising the steps of:

- generating a service invocation request message at the second machine in compliance with a markup language-based message encoding, wherein the message includes elements representing data items of at least one argument and associated with type labels selected from a group, the group including at least one placeholder type label that designates a placeholder element which represents the absence of data [see W3C "Tags for empty elements" discussion bottom of page 14]; and

- transmitting the service invocation request message from the second machine [see the rejections of the previous independent claims detailed above – Winer's RPC discloses the claimed transmission and reception – XML discloses the remaining claim elements, as described above].

As per independent claim 170:
Winer, as modified by **W3C XML**, teaches a method of invoking a service at a first machine, comprising the steps of:

- receiving at the first machine a service invocation request message generated at a second machine in compliance with a markup language-based message encoding, wherein the message includes elements representing data items of at least one argument and associated with type labels selected from a group including at least one placeholder type label that designates a placeholder element which represents the absence of data [see W3C "Tags for empty elements" discussion bottom of page 14; see the rejections of the previous independent claims detailed above – Winer's RPC discloses the claimed transmission and reception – XML discloses the remaining claim elements, as described above]; and

- invoking the service in response to the message [Winer's RPC].

As per independent claim 171:
Winer, as modified by **W3C XML**, teaches a method of invoking a service at a first machine, the method comprising the steps of:

- receiving at the first machine a service invocation request [see the rejections of the previous independent claims detailed above – Winer's RPC discloses the claimed transmission and reception – XML discloses the remaining claim elements, as described above];

- invoking the service in response to the request [Winer's RPC]; and

- transmitting from the first machine a service invocation reply message in compliance with a markup language-based message encoding, wherein the message includes elements representing data items of at least one argument and associated with type labels selected from a group, the group including at least one placeholder type label that designates a placeholder element which represents the absence of data [see W3C "Tags for empty elements" discussion bottom of page 14]; and

- transmitting the service invocation reply message from the second machine [see the rejections of the previous independent claims detailed above – Winer's RPC discloses the claimed transmission and reception – XML discloses the remaining claim elements, as described above].

As per independent claim 172:
Winer, as modified by **W3C XML**, teaches a method of invoking a service at a first machine, the method comprising the steps of:

- transmitting a service invocation request from a second machine [see the rejections of the previous independent claims detailed above – Winer's RPC discloses the claimed transmission and reception – XML discloses the remaining claim elements, as described above]; and

- receiving at the second machine a service invocation reply message in compliance with a markup language-based message encoding, wherein the message includes elements representing data items of at least one argument and associated with type labels selected from a group including at least one placeholder type label that designates a

placeholder element which represents the absence of data [see W3C "Tags for empty elements" discussion bottom of page 14].

As per multiple dependent claim 173:
Winer, as modified by **W3C XML**, teaches the placeholder element represents a programming language null object reference [see W3C "Tags for empty elements" discussion bottom of page 14].

As per multiple dependent claim 174:
Winer, as modified by **W3C XML**, teaches the placeholder element identifies an element contained elsewhere in the message [see W3C's XML tag discussion beginning page 14].

As per multiple dependent claim 175:
Winer, as modified by **W3C XML**, teaches the message includes a second type label associated with the placeholder element [see W3C's XML tag discussion beginning page 14].

As per multiple dependent claim 176:
Winer, as modified by **W3C XML**, teaches the message includes a semantic label associated with the placeholder element [see W3C's XML tag discussion beginning page 14].

As per dependent claim 177:
Winer, as modified by **W3C XML**, teaches the message includes a semantic label associated with the placeholder element [see W3C's XML tag discussion beginning page 14].

As per multiple dependent claims 181 & 182:
Winer, as modified by **W3C XML**, teaches all elements in the message designating data items are associated with type labels [see W3C type discussion beginning page 6].

Claims 165-168, 178 & 179 are rejected under 35 U.S.C. 103(a) as being obvious over **Winer**, Dave, "RPC over HTTP via XML", http://davenet.userland.com/1998/02/27/rpcOverHttpViaXml, Feb. 27, 1998, pages 1-7, in view of (no author given) "Extensible Markup Language (XML) – W3C Working Draft 14-Nov-96", W3C, document# WD-xml-961114, pages 1-27, Nov. 14, 1996 (referenced hereafter as "**W3C XML**" in this office action), and further in view of **Humpleman** et al. (U.S. Patent 6,466,971).

As per independent claim 165:
Winer, as modified by **W3C XML**, teaches a method of invoking a service at a first machine from a second machine, the method comprising the steps of:

- generating a service invocation request message at the second machine in compliance with a markup language-based message encoding [i.e., XML], wherein the message includes elements representing data items of at least one argument and associated with type labels selected from a group including at least first and second type labels, wherein the message associates an element having the first type label with an ID value, and wherein the message includes an element associated with the second type label which specifies the ID value [see W3C's XML tag discussion beginning page 14]; and

- transmitting the service invocation request message from the second machine [see the rejections of the previous independent claims detailed above – Winer's RPC discloses

the claimed transmission and reception – XML discloses the remaining claim elements, as described above].

However, **Winer**, as modified by **W3C XML**, does not explicitly teach always designating an element containing a data item specifying an ID value, as now claimed.

Humpleman teaches always designating an element containing a data item specifying an ID value [e.g., see "<parameter value="2:10:30">recordTime</parameter> </call>" and associated code listing and discussion col. 19, beginning line 63; see also the code listing shown in EXAMPLE I, col. 19].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by **Winer & W3C XML,** by implementing the improvements detailed above because it would provide the system taught by **Winer & W3C XML** with the enhanced capability of "a simplified XML-RPC format" with sufficient device interface information" that is "utilized to improve efficiency." [col. 19, lines 1-5].

As per independent claim 166:
Winer, as modified by **W3C XML**, teaches a method of invoking a service at a first machine, comprising the steps of:

- receiving at the first machine a service invocation request message generated at a second machine [see RPC discussion by Winer] in compliance with a markup language-based message encoding [i.e., XML], wherein the message includes elements representing date items of a least one argument and associated with type labels selected from a group including at least first and second type labels , wherein the message associates an element having the first type label with an ID value, and wherein the message

includes an element associated with the second type label which specifies the ID value [see W3C's XML tag discussion beginning page 14]; and

- invoking the service in response to the message [see the rejections of the previous independent claims detailed above – Winer's RPC discloses the claimed transmission and reception – XML discloses the remaining claim elements, as described above].

However, **Winer**, as modified by **W3C XML**, does not explicitly teach always designating an element containing a data item specifying an ID value, as now claimed.

Humpleman teaches always designating an element containing a data item specifying an ID value [e.g., see "<parameter value="2:10:30">recordTime</parameter> </call>" and associated code listing and discussion col. 19, beginning line 63; see also the code listing shown in EXAMPLE I, col. 19].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by **Winer & W3C XML,** by implementing the improvements detailed above because it would provide the system taught by **Winer & W3C XML** with the enhanced capability of "a simplified XML-RPC format" with sufficient device interface information" that is "utilized to improve efficiency." [col. 19, lines 1-5].

As per independent claim 167:
Winer, as modified by **W3C XML**, teaches a method of invoking a service at a first machine, the method comprising the steps of:

- receiving at the first machine a service invocation request [see the rejections of the previous independent claims

detailed above – Winer's RPC discloses the claimed transmission and reception – XML discloses the remaining claim elements, as described above];

- invoking the service in response to the request [RPC]; and

- transmitting from the first machine a service invocation reply message in compliance with a markup language-based message encoding, wherein the message includes elements representing data items of at least one argument and associated with type labels selected from a group including at least first and second type labels, wherein the message associates an element having the first type label with an ID value, and wherein the message includes an element associated with the second type label which specifies the ID value [see W3C's XML tag discussion beginning page 14]; and

- transmitting the service invocation reply message from the second machine [see the rejections of the previous independent claims detailed above – Winer's RPC discloses the claimed transmission and reception – XML discloses the remaining claim elements, as described above].

However, **Winer**, as modified by **W3C XML**, does not explicitly teach always designating an element containing a data item specifying an ID value, as now claimed.

Humpleman teaches always designating an element containing a data item specifying an ID value [e.g., see "<parameter value="2:10:30">recordTime</parameter> </call>" and associated code listing and discussion col. 19, beginning line 63; see also the code listing shown in EXAMPLE I, col. 19].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by **Winer & W3C XML,** by implementing the improvements detailed above because it would provide the system taught by **Winer & W3C XML** with the enhanced capability of "a simplified XML-RPC format" with sufficient device interface information" that is "utilized to improve efficiency." [col. 19, lines 1-5].

As per independent claim 168:
Winer, as modified by **W3C XML**, teaches a method of invoking a service at a first machine, the method comprising the steps of:

- transmitting a service invocation request from a second machine [see the rejections of the previous independent claims detailed above – Winer's RPC discloses the claimed transmission and reception – XML discloses the remaining claim elements, as described above]; and

- receiving at the second machine a service invocation reply message in compliance with a markup language-based message encoding, wherein the message includes elements representing data items of at least one argument and associated with type labels selected from a group including at least first and second type labels, wherein the message associates an element associated with the first type label with an ID value, and wherein the message includes an element associated with the second type label which specifies the ID value [see W3C's XML tag discussion beginning page 14].

However, **Winer**, as modified by **W3C XML**, does not explicitly teach <u>always designating an element containing a data item specifying an ID value</u>, as now claimed.

Humpleman teaches always designating an element containing a data item specifying an ID value [e.g., see "<parameter value="2:10:30">recordTime</parameter> </call>" and associated code listing and discussion col. 19, beginning line 63; see also the code listing shown in EXAMPLE I, col. 19].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by **Winer & W3C XML,** by implementing the improvements detailed above because it would provide the system taught by **Winer & W3C XML** with the enhanced capability of "a simplified XML-RPC format" with sufficient device interface information" that is "utilized to improve efficiency." [col. 19, lines 1-5].

As per multiple dependent claim 178:
Winer, as modified by **W3C XML**, teaches the encoding permits any element in a message to be associated with an ID which uniquely identifies the element within the message [see W3C's XML tag discussion beginning page 14].

As per dependent claim 179:
Winer, as modified by **W3C XML**, teaches the mark-up language is XML, the element is expressed as an XML element, and the ID is associated with the element via an XML attribute on the XML element whose value is the ID [e.g, see "3.3.1 Mixed Content" discussion and associated declaration beginning page 16].

Prior Art not relied upon:
Please refer to the references listed on the attached PTO-892 which are not relied upon in the claim rejections detailed above.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action (i.e., with respect to amended claims 165-168, 178 & 179). Accordingly, **THIS ACTION IS MADE FINAL**. See **MPEP § 706.07(a)**. Applicant is reminded of the extension of time policy as set forth in **37 CFR 1.136(a)**.

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to **37 CFR 1.136(a)** will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

How to Contact the Examiner:

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to **St. John Courtenay III** whose voice telephone number is **(703) 308-5217.** A voice mail service is also available at this number. Normal Flex work schedule: M – F 7:30 AM - 4:00 PM

- **All responses sent by U.S. Mail should be mailed to:**

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Patent Customers advised to FAX communications to the USPTO

http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/faxnotice.pdf

Effective Oct. 15, 2003, ALL patent application correspondence transmitted by FAX must be directed to the new PTO central FAX number:

NEW PTO CENTRAL FAX NUMBER:
703-872-9306

- Any inquiry of a general nature or relating to the status of this application should be directed to the **TC 2100 Group receptionist: (703) 305-3900.**

Please direct inquiries regarding fees, paper matching, and other issues not involving the Examiner to:
Technical Center 2100 CUSTOMER SERVICE: 703 306-5631

The Manual of Patent Examining Procedure (MPEP) is available online at:
http://www.uspto.gov/web/offices/pac/mpep/index.html

ST. JOHN COURTENAY III
PRIMARY EXAMINER